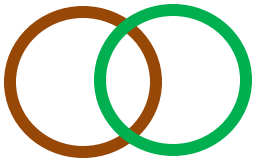
Common Questions and Answers When Planning STEM Lessons

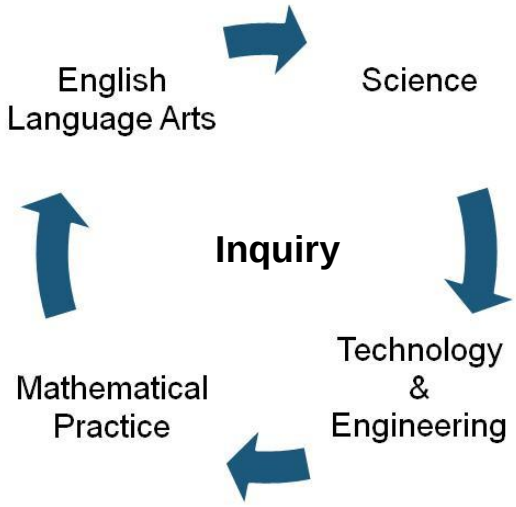
1. **What is the difference between multidisciplinary, interdisciplinary, and transdisciplinary?**

- Multidisciplinary Approach - curriculum and instruction include two or more disciplines around a theme.

- Interdisciplinary Approach - curriculum and instruction is centered on common learning across disciplines.



- Transdisciplinary Approach - involves the organization of curriculum and instruction around <u>student questions, where concepts and skills are developed through real-life context</u>



2. What makes a STEM lesson different from other lessons?

a. STEM lesson are transdisciplinary

b. STEM lessons align with the following standards:

- Common Core State Reading and Writing Standards for Literacy in Science and Technical Subjects
- Common Core State Standards for Mathematical Practice
- Maryland Technology Literacy Standards for Students (K-8)
- International Technology Education Association Standards (6-12)
- Maryland State Skills and Processes Core Learning Goals for Science

c. The content of a STEM lesson is not confined to one subject

* Exemplary STEM Practices = Exemplary Instructional Practices
A great STEM lesson uses tools that would make any lesson great.

3. Does a STEM lesson always have to include a S, T, E, and M element?

The absence of one or more STEM elements does not mean the experience is not a quality STEM learning experience. In some cases, an element may be purposefully excluded or does not apply.

4. There are no standardized tests for STEM. Why should our school focus on implementing STEM when there is no accountability for it?

While there is not an official STEM standardize test, STEM aligns with standards that are tested. Therefore, if your school is practicing exemplary STEM education then students will be exposed to skills and content that will be tested.

5. Which subject would use STEM lessons?

STEM lessons can be used in multiple subjects. STEM lessons are not “siloed” or subject specific.